

REMARKS

The Office Action mailed July 8, 2010 has been reviewed and carefully considered. No new matter has been added.

Claim 1 has been amended. Claims 1, 4-6, and 26-28 are pending.

Claims 1, 4-6 and 26-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of U.S. Patent No. 5,602,593 to Katto (hereinafter "Katto").

It is to be noted that Claim 1 is the only pending independent claim in the case.

It is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest all of the following limitations now recited in Claim 1:

a reference picture store for storing each of the fade-out start picture and the fade-in end picture;

a reference picture weighting applicator;

a reference picture weighting factor unit in direct signal communication with the reference picture store and the reference picture weighting applicator for directly receiving the fade-out start picture and the fade-in end picture from the reference picture store, and selecting weighting factors corresponding to each of the fade-out start picture and the fade-in end picture, respectively, to directly supply to said reference picture weighting applicator for coding the at least one cross-fade picture; and

a motion compensation unit in signal communication with the reference picture store and the reference picture weighting applicator for receiving at least one of the fade-out start picture and the fade-in end picture from the reference picture store and providing at least one of a motion compensated fade-out start picture and a motion compensated fade-in end picture to the reference picture weighting applicator for coding the at least one cross-fade picture.

As noted above, Claim 1 has been amended. Support for the amendments to Claim 1 may be found at least at Figure 2 and page 7, lines 9-11 of the instant application.

Against the preceding limitations of Claim 1 and, in particular, against the limitations “a reference picture weighting factor unit in direct signal communication with the reference picture store and the reference picture weighting applicator for directly receiving the fade-out start picture and the fade-in end picture from the reference picture store”, the Examiner cited Figures 2 and 3 of Katto, reasoning “a reference picture weighting factor unit 40 in signal communication with the reference picture store 38 and the reference picture weighting applicator 16 for receiving the pictures from the reference picture store 38”. The Applicants respectfully disagree with the Examiner’s reading of Katto, irrespective of the clarifying amendment set forth above.

For example, the Examiner has equated element “FM” 38 of Figure 2 of Katto to the “reference picture store” recited in Claim 1 and has further equated element “window function renewal circuit” 40 of Figure 2 of Katto to the “reference picture weighting factor unit” recited in Claim 1. However, while Claim 1 recites, *inter alia*, “a reference picture weighting factor unit in direct signal communication with the reference picture store and the reference picture weighting applicator for directly receiving the fade-out start picture and the fade-in end picture from the reference picture store” (emphasis added), Figure 2 of Katto shows two outputs from FM 38, neither of which are connected to the window function renewal circuit 40, let alone directly connected as essentially recited in Claim 1. That is, a first output of FM 38 in Figure 2 of Katto is connected to element ME 37 and a second output of FM 38 is connected to element MC 39, neither of which is the window function renewal circuit 40 equated by the Examiner to the reference picture weighting applicator recited in Claim 1. Further regarding frame memory 14 in Figure 3 of Katto, such frame memory 14 also is not connected in direct signal communication with the window function renewal circuit 40 also shown in Figure 3 of Katto. Thus, Katto does not teach or suggest all of the above reproduced connections between the elements of the video encoder recited in Claim 1. Accordingly, Katto differs structurally from video encoder recited in Claim 1.

Hence, Katto fails to teach or suggest all of the above reproduced limitations of Claim 1. Moreover, the AIPA does not cure the deficiencies of Katto, and is completely silent regarding the same, as the AIPA does not even include a reference picture

weighting factor unit in the first place, let alone the detailed limitations relating to the same explicitly recited in Claim 1.

The failure of an asserted combination to teach or suggest each and every feature of a claim remains fatal to an obviousness rejection under 35 U.S.C. § 103. Section 2143.03 of the MPEP requires the “consideration” of every claim feature in an obviousness determination. To render a claim unpatentable, however, the Office must do more than merely “consider” each and every feature for this claim. Instead, the asserted combination of the patents must also teach or suggest *each and every claim feature*. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (emphasis added) (to establish *prima facie* obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art). Indeed, as the Board of Patent Appeal and Interferences has recently confirmed, a proper obviousness determination requires that an Examiner make “a searching comparison of the claimed invention - *including all its limitations* - with the teaching of the prior art.” See *In re Wada and Murphy*, Appeal 2007-3733, citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis in original).

Accordingly, Claim 1 is patentably distinct and nonobvious over the cited references for at least the reasons set forth above.

“If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious” (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 4-6 and 26-28 directly or indirectly depend from Claim 1 and, thus, includes all the elements of Claim 1. Accordingly, Claims 4-6 and 26-28 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to independent Claim 1.

Moreover, said dependent claims include patentable subject matter in and of themselves and are, thus, patentable distinct and non-obvious over the cited references in their own right. For example, none of the cited references teach or suggest “wherein said reference picture weighting applicator comprises a shift register”, as recited in Claim 27.

The Examiner has cited Figure 3 of Katto as disclosing the preceding reproduced limitations of Claim 27, reasoning “wherein the reference picture weighting applicator comprises a shift register 16”. The Applicants respectfully disagree with the Examiner’s reading of Katto. For example, element 16 in Figure of Katto is described as a multiplier. A multiplier is not

necessarily a shift register and certainly does not teach or suggest a shift register. Moreover, we note that the entire disclosure of Katto is silent regarding the words “shift” and “register”. Hence, Katto fails to teach or suggest the above reproduced limitations of Claim 26. Moreover, the AAPA fails to cure the deficiencies of Katto, and is completely silent regarding the same which is not surprising since the AAPA fails to disclose the reference picture weighting applicator in the first place.

Hence, reconsideration of the rejections is respectfully requested.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of July 8, 2010, be withdrawn, that pending claims 1, 4-6, and 26-28 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

No fee is believed due with regard to the filing of this amendment. However, if a fee is due, please charge Deposit Account No. 07-0832.

Respectfully submitted,
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